

REMARKS

This Amendment, filed in reply to the Office Action dated January 13, 2011, is believed to be fully responsive to each point of objection and rejection raised therein. Accordingly, favorable reconsideration on the merits is respectfully requested.

Claims 1-11, 14, 15 and 18-21 are all the claims pending in the Application. Claims 1-11 are withdrawn from consideration as allegedly being directed to non-elected inventions. Claims 14, 15 and 18-21 are examined on the merits, and are rejected. Claim 14 is amended herewith. Support for the amendment to Claim 14 can be found throughout the specification as originally filed, and at, for example, page 3, 1st paragraph, page 15, 2nd paragraph, and Table 3.

No new matter is added by way of this amendment. Entry and consideration of this amendment are respectfully requested.

Claims 14, 15 and 18-21 are Patentable Under 35 U.S.C. § 103

1. On page 3 of the Office Action, the Examiner maintains the rejection of Claims 14, 15 and 18-20 under 35 U.S.C. 103(a) as allegedly being unpatentable over EP 1174148A1, of record, in view of U.S. 2003/0190316A1, of record, essentially for the reasons set forth in the Office Action mailed May 13, 2010. For brevity, these reasons are not reiterated herein.

Initially, Applicants wish to thank the Examiner and her Supervisor for the helpful telephonic interview of March 1, 2011, in which amendments to the claims that would obviate the outstanding rejections were discussed. Specifically, during the interview, the Examiner and her Supervisor indicated that amending Claim 14 to recite that, in the claimed preparation, the formation of soluble antibody dimers and trimers is inhibited, would overcome the rejections of record. Thus, solely to advance prosecution, and without agreeing with or acquiescing to the

merits of the rejection, Applicants note that Claim 14 is amended herewith consistent with the claim amendments proposed by the Examiner and her Supervisor.

First, Applicants respectfully submit that EP 1174148A1 and U.S. 2003/0190316A1, taken alone or in combination, neither teach nor reasonably suggest an antibody composition that possesses this property. Thus, consistent with the Examiner's (and her Supervisor's) determination, Applicants respectfully submit that neither the cited references, nor the art as a whole, disclose or suggest the presently claimed invention, at least for the reasons provided herein, and those already of record. Applicants respectfully submit that the claims as amended are patentable over EP 1174148A1 and U.S. 2003/0190316A1 for at least this reason.

Second, and as discussed at length in the Amendments filed January 20, 2010,¹ May 29, 2009,² and November 10, 2010,³ which arguments are also incorporated herein by reference as if set forth in their entirety, Applicants maintain that it would have been entirely *unexpected* to those of ordinary skill in the art that the claimed antibody preparation, containing the recited amounts of citric acid and glycine, would inhibit the formation of soluble antibody associations, such as soluble antibody dimers and trimers, to the extent that it does. That is, the superiority of the property recited in Claim 14 as amended would have been wholly unexpected to those of ordinary skill in the art.

Specifically, as previously noted by Applicants, Table 3 of the specification as filed demonstrates that when phosphoric acid (Formulation 1) or citric acid (with or without mannitol;

¹ See, e.g., page 10.

² See, e.g., pages 10, and 11, and the Rule 132 Declaration attached therewith.

³ See, e.g., pages 6-8.

Formulations 2 and 3, respectively) is used as an antibody stabilization buffer, soluble associations of antibody are present in an amount of 0.20%-0.22% following incubation. Further, Table 2 in the Rule 132 Declaration filed May 29, 2009, demonstrates that under the same incubation conditions, when glycine is used as an antibody stabilization buffer, soluble associations of antibody, such as dimers and trimers, are present in an amount of 0.18% following incubation. However, when citric acid and glycine are *combined*, the amount of soluble associations of antibody following incubation is merely 0.02% - approximately ten-fold less vis-à-vis compositions wherein glycine or citrate are present individually. One of ordinary skill in the art could not have predicted or expected that combining glycine and citric acid in the same composition would have produced such a synergistic reduction in the formation of soluble associations of antibody, such as soluble antibody dimers and trimers, by an order of magnitude vis-à-vis compositions containing glycine or citric acid alone. That is, there is nothing in the art that would have led one of ordinary skill in the art to have even contemplated, much less expected, such synergism. Further, such unexpectedness is evidenced at least by the results obtained by Applicants when glycine or citric acid were used alone.

Accordingly, Applicants respectfully submit that the unexpected superiority of this property, which property is recited in Claim 14 as amended, is probative of the nonobviousness of the presently claimed invention. It is well-settled that an unexpected result, sufficient to rebut a charge of obviousness, may be established by demonstrating an effect greater than the sum of each the effects taken separately (*i.e.*, a demonstration of synergism). See *Merck & Co. Inc. v. Biocraft Laboratories Inc.*, 874 F.2d 804, 10 USPQ2d 1843 (Fed. Cir. 1989).

In view of the foregoing, Applicants respectfully submit that the claims as amended are nonobvious, and allowable.

2. On page 7 of the Office Action, the Examiner rejects Claim 21 under 35 U.S.C. § 103(a) as allegedly being unpatentable over EP 1174148 and U.S. Patent Application Prgrant Publication No. 2003/0190316, as applied above in the rejection of Claims 14, 15 and 18-20, and further in view of U.S. Patent No. 6,488,930, of record.

3. On page 9 of the Office Action, the Examiner rejects Claim 21 under 35 U.S.C. § 103(a) as allegedly being unpatentable over EP 1174148 and U.S. Patent Application Prgrant Publication No. 2003/0190316, as applied above in the rejection of Claims 14, 15 and 18-20, and further in view of U.S. Patent No. 6,437,098, of record.

In making these rejections, the Examiner contends that, at the time of the invention, those of ordinary skill in the art would readily have employed the stabilizing formulation taught by the ‘148 publication and the ‘316 publication, to stabilize a CCR4 humanized antibody, or a humanized ganglioside GD3 antibody, as allegedly disclosed by the ‘930 and ‘098 Patents, respectively.

Applicants respectfully disagree, and traverse these rejections in view of the following remarks.

Because the ‘930 and ‘098 Patents merely disclose humanized anti-CCR4 and anti-GD3 antibodies, and do not disclose glycine- or citric acid-based stabilization formulas, much less antibody solutions that inhibit soluble association of antibody, Applicants respectfully submit that Claim 21 is patentable for the same reasons as presented above.

Reconsideration and withdrawal of the rejections under 35 U.S.C. § 103(a) is respectfully requested.

Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

/Alan C. Townsley/

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON DC SUGHRUE/265550

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CUSTOMER NUMBER

Alan C. Townsley, Ph.D.
Registration No. 64,740

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